



[> home](#) [> about](#) [> feedback](#) [> login](#)

US Patent & Trademark Office



Try the *new* Portal design

Give us your opinion after using it.

Search Results

Search Results for: **[expanded<AND>((e-r<AND>((ER model))))]**

Found **18** of **126,861** searched.

Search within Results



[> Advanced Search](#)

[> Search Help/Tips](#)

Sort by: Title Publication Publication Date Score Binder

Results 1 - 18 of 18 [short listing](#)

- 1 Semantics of update operations for an extended entity-relationship model 82%

Bogdan Czejdo , Ramez Elmasri , Marek Rusinkiewicz , David W. Embley

Proceedings of the 1988 ACM sixteenth annual conference on Computer science
February 1988

The Entity-Category-Relationship (ECR) model extends the Entity-Relationship (ER) model with the concepts of subclass and generalisation categories. In this paper semantics of update operations for the ECR model are discussed. The proposed update operations can be implemented as an interactive data manipulation language. This language is based on algebraic operators that can be invoked graphically to operate on ECR diagrams. A method of implementing the graphical ECR interface for accessing ...

- 2 Logical modeling of temporal data 80%

Arie Segev , Arie Shoshani

ACM SIGMOD Record , Proceedings of the 1987 ACM SIGMOD international conference on Management of data December 1987
Volume 16 Issue 3

In this paper we examine the semantics and develop constructs for temporal data independent of any traditional data model, such as the relational or network data models. Unlike many other works which extend existing models to support temporal data, our purpose is to characterize the properties of temporal data and operators over them without being influenced by traditional models which were not specifically designed to model temporal data. We develop data constructs that represent sequences ...

- 3 On visual formalisms 80%


David Harel

Communications of the ACM May 1988
Volume 31 Issue 5

The higraph, a general kind of diagramming object, forms a visual formalism of

topological nature. Higraphs are suited for a wide array of applications to databases, knowledge representation, and, most notably, the behavioral specification of complex concurrent systems using the higraph-based language of statecharts.

- 4




Database schema evolution using EVER diagrams

Chien-Tsai Liu , Shi-Kuo Chang , Panos K. Chrysanthis

Proceedings of the workshop on Advanced visual interfaces June 1994

We present an approach to schema evolution through changes to the ER diagram representing the schema of a database. In order to facilitate changes to the ER schema we enhance the graphical constructs used in ER diagrams, and develop EVER, an EVolutionary ER diagram for specifying the derivation relationships between schema versions, relationships among attributes, and the conditions for maintaining consistent views of programs. In this paper, we demonstrate the mapping of the EVER diagram i ...

80%
- 5



A plan-based intelligent assistant that supports the software development


Karen E. Huff , Victor R. Lesser

Proceedings of the third ACM SIGSOFT/SIGPLAN software engineering symposium on Practical software development environments November 1988

Volume 13 , 24 Issue 5 , 2

We describe how an environment can be extended to support the process of software development. Our approach is based on the AI planning paradigm. Processes are formally defined hierarchically via plan operators, using multiple levels of abstraction. Plans are constructed dynamically from the operators; the sequences of actions in plans are tailored to the context of their use, and conflicts among actions are prevented. Monitoring of the dev ...

77%
- 6




Conceptual modeling for ETL processes

Panos Vassiliadis , Alkis Simitsis , Spiros Skiadopoulos

Proceedings of the 5th ACM international workshop on Data Warehousing and OLAP November 2002

Extraction-Transformation-Loading (ETL) tools are pieces of software responsible for the extraction of data from several sources, their cleansing, customization and insertion into a data warehouse. In this paper, we focus on the problem of the definition of ETL activities and provide formal foundations for their conceptual representation. The proposed conceptual model is (a) customized for the tracing of inter-attribute relationships and the respective ETL activities in the early stages of a dat ...

77%
- 7



Teaching Database design through an Entity-Relationship approach

C. Chrisman

ACM SIGCSE Bulletin , Proceedings of the thirteenth SIGCSE technical symposium on Computer science education February 1982

Volume 14 Issue 1

This paper will describe how the Entity-Relationship approach is used in teaching an advanced Database course at Northern Illinois University. The Entity-Relationship approach provides a framework for the course to study basic issues in Database design and implementations in the major commercial Database Management Systems.

77%
- 8

The planar package planner for system designers

77%



William R. Heller , G. Sorkin , Klim Maling

Proceedings of the nineteenth design automation conference January 1982

The Planar Package Planner is a design aid aimed at helping to form a package layout plan, given only the information available during project initiation to digital system logic and package designers. A hierarchical approach is adopted, and a clustering program makes possible use of the layout scheme for bottom-up as well as top-down design. The layout plan for an experimental microprocessor is worked out as an example of the method.

9 Formes: An object and time oriented system for music composition and synthesis 77%



Pierre Cointe , Xavier Rodet

Proceedings of the 1984 ACM Symposium on LISP and functional programming
August 1984

It is well known [Winograd79] that the development and use of complex systems was stifled by the inadequacy of ordinary programming languages. Music Composition and Synthesis (MCS) by computer offers an appropriate example of this "complexity barrier". Object-Oriented programming matches a lot of MCS requirements: an object-oriented programming environment, called Formes, has been developed at IRCAM, including original features like precise control of Tim ...

10 An integrated model of drilling vessel operations 77%



Susan E. Hoffman , Melba M. Crawford , James R. Wilson

Proceedings of the 15th conference on Winter simulation - Volume 1 December 1983

A combined discrete-event/continuous/process-interaction simulation model has been developed to evaluate the effects of weather and supply-ship availability on off-shore drilling operations at a specified location and time of year with a specified drilling vessel. The continuous submodel includes: (a) autoregressive-moving average and transfer-function models to represent weather conditions; (b) a difference equation to monitor effective work time for the current operation on the drilling v ...

11 Graphical interaction with heterogeneous databases 77%



T. Catarci , G. Santucci , J. Cardiff

The VLDB Journal — The International Journal on Very Large Data Bases May 1997

Volume 6 Issue 2

During the past few years our research efforts have been inspired by two different needs. On one hand, the number of non-expert users accessing databases is growing apace. On the other, information systems will no longer be characterized by a single centralized architecture, but rather by several heterogeneous component systems. In order to address such needs we have designed a new query system with both user-oriented and multidatabase features. The system's main components are an adaptive visua ...

12 Database design with common sense business reasoning and learning 77%



Veda C. Storey , Roger H. L. Chiang , Debabrata Dey , Robert C. Goldstein , Shankar Sudaresan

ACM Transactions on Database Systems (TODS) December 1997

Volume 22 Issue 4


Automated database design systems embody knowledge about the database design process. However, their lack of knowledge about the domains for which databases are being developed significantly limits their usefulness. A methodology for acquiring and

using general world knowledge about business for database design has been developed and implemented in a system called the Common Sense Business Reasoner, which acquires facts about application domains and organizes them into a hierarchical, con ...


13 RUBRIC: an environment for full text information retrieval 77%

 Richard M. Tong , Victor N. Askman , James F. Cunningham , Carl J. Tollander
Proceedings of the 8th annual international ACM SIGIR conference on Research and development in information retrieval June 1985

14 To table or not to table: a hypertabular answer 77%

 Giuseppe Santucci , Laura Tarantino
ACM SIGMOD Record December 1996
Volume 25 Issue 4
Suitable data set organizers are necessary to help users assimilating information retrieved from a database. In this paper we present (1) a general hypertextual framework for the interaction with tables, and (2) a specialization of the framework in order to present in hypertextual format the results of queries expressed in terms of a visual semantic query language.

15 Perspectives on database theory 77%

 Mihalīs Yannakakis
ACM SIGACT News September 1996
Volume 27 Issue 3


16 ERC++: a model based on object and logic paradigms 77%

 Zahir Tari
Proceedings of the second international conference on Information and knowledge management December 1993

17 InGRAPH: graphical interface for a fully object-oriented database 77%

 system
Xuequn Wu , Guido Dinkhoff
Proceedings of the 1993 ACM/SIGAPP symposium on Applied computing: states of the art and practice March 1993

18 Query evaluation techniques for large databases 77%

 Goetz Graefe
ACM Computing Surveys (CSUR) June 1993
Volume 25 Issue 2
Database management systems will continue to manage large data volumes. Thus, efficient algorithms for accessing and manipulating large sets and sequences will be required to provide acceptable performance. The advent of object-oriented and extensible database systems will not solve this problem. On the contrary, modern data models exacerbate the problem: In order to manipulate large sets of complex objects as efficiently as today's database systems manipulate simple records, query-processi ...

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.



[> home](#) [> about](#) [> feedback](#) [> login](#)

US Patent & Trademark Office



Try the *new* Portal design

Give us your opinion after using it.

Search Results

Search Results for: **[link<AND>((polynomial<AND>((e-r<AND>((expanded AND ER AND model))))))]**

Found **112** of **126,861** searched.

Search within Results



[> Advanced Search](#)

[> Search Help/Tips](#)

Sort by: Title Publication Publication Date Score Binder

Results 1 - 20 of 112 short listing



1

2

3

4

5

6



- 1** Robustness: CMC: a pragmatic approach to model checking real code 80%
 Madanlal Musuvathi , David Y. W. Park , Andy Chou , Dawson R. Engler , David L. Dill
ACM SIGOPS Operating Systems Review December 2002
 Volume 36 Issue SI
 Many system errors do not emerge unless some intricate sequence of events occurs. In practice, this means that most systems have errors that only trigger after days or weeks of execution. Model checking [4] is an effective way to find such subtle errors. It takes a simplified description of the code and exhaustively tests it on all inputs, using techniques to explore vast state spaces efficiently. Unfortunately, while model checking systems code would be wonderful, it is almost never done in pra ...
- 2** Curriculum 68: Recommendations for academic programs in computer science: a report of the ACM curriculum committee on computer science 80%
 William F. Atchison , Samuel D. Conte , John W. Hamblen , Thomas E. Hull , Thomas A. Keenan , William B. Kehl , Edward J. McCluskey , Silvio O. Navarro , Werner C. Rheinboldt , Earl J. Schweppe , William Viavant , David M. Young
Communications of the ACM March 1968
 Volume 11 Issue 3
- 3** Perspectives on database theory 80%
 Mihalis Yannakakis
ACM SIGACT News September 1996
 Volume 27 Issue 3
- 4** Uniform closure properties of P-computable functions 77%
 E Kaltofen



Proceedings of the eighteenth annual ACM symposium on Theory of computing
November 1986

5

Real-time data acquisition at mission control

77%



John Muratore , Troy Heindel , Terri Murphy , Arthur Rasmussen , Robert McFarland
Communications of the ACM December 1990
Volume 33 Issue 12

Perhaps one of the most powerful symbols of the United States' technological prowess is the Mission Control Center (MCC) at the Lyndon B. Johnson Space Center in Houston. The rooms at Mission Control have been witness to major milestones in the history of American technology such as the first lunar landing, the rescue of Skylab, and the first launch of the Space Shuttle. When Mission Control was first activated in the early 1960s it was truly a technological marvel. This facility, however, ...

6

Definable relations and first-order query languages over strings

77%



Michael Benedikt , Leonid Libkin , Thomas Schwentick , Luc Segoufin
Journal of the ACM (JACM) September 2003
Volume 50 Issue 5

We study analogs of classical relational calculus in the context of strings. We start by studying string logics. Taking a classical model-theoretic approach, we fix a set of string operations and look at the resulting collection of definable relations. These form an algebra---a class of n -ary relations for every n , closed under projection and Boolean operations. We show that by choosing the string vocabulary carefully, we get string logics that have desirable properties: computable ...

7

Views on transportability of Lisp and Lisp-based systems

77%



Richard J. Fateman
Proceedings of the fourth ACM symposium on Symbolic and algebraic computation August 1981

The availability of new large-address-space computers has provided us an opportunity to examine techniques for transferring programming systems, and in particular, Lisp systems, to new computers. We contrast two approaches: designing and building a Virtual Machine implementation of Lisp, and (re)writing the system in a "portable" programming language ('C'). Our conclusion is that the latter approach may very well be better.

8

An interactive network of time-sharing computers

77%



Ronald M. Rutledge , Albin L. Vareha , Lee C. Varian , Allan H. Weis , Salomon F. Seroussi , James W. Mayer , Joan F. Jaffe , Mary Anne K. Angell
Proceedings of the 1969 24th national conference August 1969

This paper describes the design and implementation of an experimental interactive time-sharing network of computers created as a joint effort by Carnegie-Mellon University (CMU), Princeton University and the Research Division of IBM. The motivation behind the creation, the functional capabilities, and applications of the network are some of the key points addressed. Design philosophy and major implementation considerations are thoroughly explored. At present, all network nodes are IBM 360 M ...

9

On routing two-point nets across a channel

77%



Ron Y. Pinter
Proceedings of the nineteenth design automation conference January 1982

Many problems that arise in general channel routing manifest themselves in simpler situations. We consider connecting a set of n terminals on a line to another set on a

parallel line across a rectangular channel. We show that in any solution to the problem that (almost) minimizes the width of the channel (i.e. the distance between the lines the terminals reside on) a net may require as many as $\Theta(n)$ horizontal jogs no net routed from top to bottom need ever turn upward ...

10 Reference machines require non-linear time to maintain disjoint sets 77%



Robert Endre Tarjan

Proceedings of the ninth annual ACM symposium on Theory of computing May 1977

This paper describes a machine model intended to be useful in deriving realistic complexity bounds for tasks requiring list processing. As an example of the use of the model, the paper shows that any such machine requires non-linear time in the worst case to compute unions of disjoint sets on-line. All set union algorithms known to the author are instances of the model and are thus subject to the derived bound. One of the known algorithms achieves the bound to within a constant factor.

11 Anomaly detection in concurrent programs 77%



G. Bristow , C. Drey , B. Edwards , W. Riddle

Proceedings of the 4th international conference on Software engineering September 1979

An approach to the analysis of concurrent software is discussed. The approach, called anomaly detection, involves the algorithmic derivation of information concerning potential errors and the subsequent, possibly non-algorithmic determination of whether or not the reported anomalies are actual errors. We give overviews of algorithms for detecting data-usage and synchronization anomalies and discuss how this technique may be integrated within a general software develop ...

12 Applications of combinatorial designs in computer science 77%



Charles J. Colbourn , Paul C. van Oorschot

ACM Computing Surveys (CSUR) June 1989
Volume 21 Issue 2

The theory of combinatorial designs has been used in widely different areas of computation concerned with the design and analysis of both algorithms and hardware. Combinatorial designs capture a subtle balancing property that is inherent in many difficult problems and hence can provide a sophisticated tool for addressing these problems. The role of combinatorial designs in solving many problems that are basic to the field of computing is explored in this paper. Case studies of many applicat ...

13 Technical Correspondence: A neural net compiler system for hierarchical 77%



organization

Rajeev Kumar

ACM SIGPLAN Notices February 2001
Volume 36 Issue 2

We present a language framework for handling arbitrarily complex neural computations. The software architecture - which we call an **Artificial Neural Network Compiler for Hierarchical ORganization (ANCHOR)** - facilitates network hierarchy and simpler sub-mappings. We define a **Net Definition Language (NDL)** which is implemented in object-oriented programming paradigm; a trained network is decompiled bac ...

14 SIGIR 2 - Information retrieval systems: The leadermart system and 77%



service

Andrew J. Kasarda , Donald J. Hillman

Proceedings of the ACM annual conference - Volume 1 August 1972

The LEADERMART System and the service it provides are the product of a coordinated three-phased development project conducted at Lehigh University with National Science Foundation support. The service comprises a user-oriented, multi-optioned information retrieval system featuring innovative as well as standard retrieval techniques. Its available online data bases include nearly one half million documents derived from COMPENDEX, CAS Condensates, and various other document sets, oriented toward t ...

15 Session 1: creative mathematics: Secure multi-party computation

77%



problems and their applications: a review and open problems

Wenliang Du , Mikhail J. Atallah

Proceedings of the 2001 workshop on New security paradigms September 2001

The growth of the Internet has triggered tremendous opportunities for cooperative computation, where people are jointly conducting computation tasks based on the private inputs they each supplies. These computations could occur between mutually untrusted parties, or even between competitors. For example, customers might send to a remote database queries that contain private information; two competing financial organizations might jointly invest in a project that must satisfy both organizations' ...

16 Managing periodically updated data in relational databases: a stochastic

77%



modeling approach

Avigdor Gal , Jonathan Eckstein

Journal of the ACM (JACM) November 2001

Volume 48 Issue 6

Recent trends in information management involve the periodic transcription of data onto secondary devices in a networked environment, and the proper scheduling of these transcriptions is critical for efficient data management. To assist in the scheduling process, we are interested in modeling *data obsolescence*, that is, the reduction of consistency over time between a relation and its replica. The modeling is based on techniques from the field of stochastic processes, and provides several ...

17 Modeling class hierarchies with contradictions

77%



A. Borgida

Proceedings of the 1988 ACM SIGMOD international conference on Management of data June 1988

One characteristic feature of object-oriented systems and knowledge bases (semantic data models, conceptual modeling languages, AI frames) is that they offer as a basic paradigm the notion of objects grouped into classes, which are themselves organized in subclass hierarchies. Through ideas such as inheritance and bounded polymorphism, this feature supports the technique of "abstraction by generalization", which has been argued to be of importance in designing I ...

18 A low-bandwidth network file system

77%



Athicha Muthitacharoen , Benjie Chen , David Mazières

ACM SIGOPS Operating Systems Review , Proceedings of the eighteenth ACM symposium on Operating systems principles October 2001

Volume 35 Issue 5

Users rarely consider running network file systems over slow or wide-area networks, as the performance would be unacceptable and the bandwidth consumption too high.

Nonetheless, efficient remote file access would often be desirable over such networks--particularly when high latency makes remote login sessions unresponsive. Rather than run interactive programs such as editors remotely, users could run the programs locally and manipulate remote files through the file system. To do so, however, wo ...

19 On-line textile designing

77%



Janice R. Lourie , John J. Lorenzo , Abel Bomberault

Communications of the ACM July 1966

Volume 9 Issue 7

20 A language and model for computer design

77%



N. G. Denil

Communications of the ACM July 1966

Volume 9 Issue 7

Results 1 - 20 of 112

short listing

Prev
Page[1](#)[2](#)[3](#)[4](#)[5](#)[6](#)Next
Page

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)**IEEE Xplore**
RELEASE 1.8Welcome
United States Patent and Trademark Office[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)[Quick Links](#)

» See

Welcome to IEEE Xplore™

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

Your search matched **2** of **1000582** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.**Refine This Search:**

You may refine your search by editing the current search expression or enter new one in the text box.

☐ Check to search within this result set**Results Key:****JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard**1 An LSI Implementation of an Intelligent CRC Computer and Programmable Character Comparator***Weissberger, A.J.;*

Solid-State Circuits, IEEE Journal of , Volume: 15 , Issue: 1 , Feb 1980

Pages:52 - 60

[\[Abstract\]](#) [\[PDF Full-Text \(888 KB\)\]](#) **IEEE JNL****2 Characteristics' prediction in urban and suburban environments***Blaunstein, N.; Giladi, R.; Levin, M.;*

Vehicular Technology, IEEE Transactions on , Volume: 47 , Issue: 1 , Feb. 19

Pages:225 - 234

[\[Abstract\]](#) [\[PDF Full-Text \(348 KB\)\]](#) **IEEE JNL**

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

IEEE Xplore
RELEASE 1.8Welcome
United States Patent and Trademark Office[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)[Quick Links](#)» [See](#)

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

Your search matched **3** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.**Results Key:****JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard**1 Free on the range***Malone, T.W.;*

Internet Computing, IEEE ,Volume: 1 , Issue: 3 , May-June 1997

Pages:8 - 20

[\[Abstract\]](#) [\[PDF Full-Text \(976KB\)\]](#) **IEEE JNL****2 Tools for inventing organizations: toward a handbook of organizational processes***Malone, T.W. ; Crowston, K. ; Jintae Lee; Pentland, B.;*

Enabling Technologies: Infrastructure for Collaborative Enterprises, 1993. Proceedings., Second Workshop on , 20-22 April 1993

Pages:72 - 82

[\[Abstract\]](#) [\[PDF Full-Text \(944KB\)\]](#) **IEEE CNF****3 Information technology and the new organization***Malone, T.W. ; Rockart, J.F.;*

System Sciences, 1992. Proceedings of the Twenty-Fifth Hawaii International Conference on ,Volume: iv , 7-10 Jan. 1992

Pages:636 - 643 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(716KB\)\]](#) **IEEE CNF**

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)